Southern Electric 33Kv Refurbishment
Headington to Bicester Overhead Line
Oxfordshire

Archaeological Watching Brief and Excavation

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SOUTHERN ELECTRIC 33 Kv REFURBISHMENT HEADINGTON TO BICESTER OVERHEAD LINE OXFORDSHIRE

Archaeological Watching Brief and Excavation

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SUMMARY

Wessex Archaeology was commissioned by Scottish and Southern Power plc (through Bruton Knowles) to undertake an archaeological watching brief and advance excavation of post settings during the refurbishment of the 33000 volt (33Kv) overhead supply line from Headington to Bicester, in Oxfordshire (NGR 454500 208300 to 457800 221200).

The refurbishment route passed close to, and indeed through, several sites of archaeological interest as identified by the Oxfordshire County Archaeological Services.

A watching brief maintained to the north of Headington recovered unstratified finds consistent with anticipated later prehistoric/Roman activity, but no features or deposits of archaeological significance were observed.

A watching brief at Woodeaton/Islip adjacent to the location of two Scheduled Monuments of Late Iron Age/Roman date identified ditches and other archaeological features associated with these monuments, thereby confirming the presence of archaeological remains beyond the boundaries of the Scheduled areas.

An excavation and watching brief to the south of Bicester was focused on the known Roman small town of Alchester, also a Scheduled Monument. The excavations here produced considerable evidence of Roman activity, including clarification of the nature of the main approach road from the south as well a minor east/west aligned road or trackway. Several occupation layers were identified to the east of the town and additional features recorded can be linked to post-Roman occupation of the town and its immediate environs.

The work was further informed by a geophysical survey within selected areas, commissioned by Wessex Archaeology for this project.

The archive is currently stored at the offices of Wessex Archaeology at Old Sarum, Salisbury, under the site code **48266,** but will be deposited at the Oxfordshire County Museums Service in due course.

SOUTHERN ELECTRIC 33 Kv REFURBISHMENT HEADINGTON TO BICESTER OVERHEAD LINE OXFORDSHIRE

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The collaborative role and assistance throughout the project of Paul Smith (Oxfordshire County Archaeological Services), and Rob Perrin and Gerry Friell (English Heritage) is duly acknowledged.

The project was managed on behalf of Wessex Archaeology by Mick Rawlings. The watching brief was carried out by Mark Dunkley, Steve Webster and Caroline Appleton. The excavation was undertaken by Mark Dunkley with the assistance of Lee Newton and Gemma Riley, and this report was compiled by Mark Dunkley. The finds were assessed by Rachel Seager Smith and Nicholas A. Wells. Pippa Smith examined the animal bone and Jaqueline I. McKinley examined the human bone. The illustrations were prepared by S. E. James.

SOUTHERN ELECTRIC 33 Kv REFURBISHMENT HEADINGTON TO BICESTER OVERHEAD LINE OXFORDSHIRE

Archaeological Watching Brief and Excavation

1 INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 Wessex Archaeology was commissioned by Scottish and Southern Power plc (through Bruton Knowles) to undertake an archaeological watching brief and excavation in five selected areas during the refurbishment of the 33,000 volt (33Kv) overhead supply line between Headington and Bicester, Oxfordshire (**Figure 1**).

1.1.2 Section 38 of *The Electricity Act* 1989 requires companies to have regard for the desirability of preserving and protecting *inter alia* buildings or sites of historic or archaeological interest, and to do whatever is reasonably possible to mitigate any adverse effect on such sites.

1.1.3 The programme of refurbishment involved work within a Scheduled Monument at Alchester (County No. OX 18) and also in the vicinity of other Scheduled and non-Scheduled archaeological sites. Two licences to undertake geophysical surveying within Scheduled Monuments were granted under Section 42 of the *Ancient Monuments and Areas Act* 1979 (as amended) by English Heritage in June 2000. Consent for the refurbishment works within the Scheduled Monument was granted under Section 2 of the aforementioned *Act* by the Secretary of State in July 2000.

1.1.4 A Design Brief for the programme of archaeological mitigation was prepared by the Archaeological Officer of Oxfordshire County Council in consultation with the relevant English Heritage Inspector of Ancient Monuments. A Project Design was prepared by Wessex Archaeology (2000) in response to the Design Brief.

1.1.5 The archaeological watching brief was carried out intermittently between the 22nd August 2000 and 31st October 2001. The advance excavation of post settings was undertaken between the 16th-27th October 2000. Full details of all work is available in the project archive.

1.2 SITE LOCATION, TOPOGRAPHY AND GEOLOGY

1.2.1 The 33 Kv line refurbishment extended for over 12.5 km (**Figure 1**), from Headington on the north-eastern outskirts of Oxford (NGR 4545 1083), through to the southern edge of Bicester (NGR 4578 1212).

1.2.2 The southern part of the route at Headington crossed the western end of Wadley Hill and continued towards Bicester via Drun's Hill. After crossing another smaller hill the route lay within the level floodplain of the River Ray.

1.2.3 The underlying solid geology of the route comprises Cornbrash of the Jurassic Period above the Oolitic limestone series (Geological Map of Great Britain, Sheet 2, 1:625 000).

1.3 ARCHAEOLOGICAL BACKGROUND

1.3.1 The route passed directly through or adjacent to a number of sites of archaeological interest and five areas were identified in the Design Brief as being of potential significance (**Figure 1, Areas 1-5**).

1.3.2 **Area 1** was located to the north of Headington between the A40 and the edge of College Pond on a gentle south-facing slope at around *c*. 70m aOD. (**Figure 2**). There is considerable evidence of Romano-British settlement activity immediately to the north of Headington, on both sides of the Barton Brook. Prominent scatters of Romano-British occupation material have been identified, including stone, tile and pottery to the north-west of Wick Farm.

1.3.3 **Area 2** was located at the summit of Drun's Hill, Woodeaton at *c*. 80m aOD (**Figure 2**). A large quantity of Romano-British artefacts has been recovered from Drun's Hill. This may have been a bronze and metal-working site associated with the nearby temple at Woodeaton (Bagnall Smith 1995; Cheetham 1995).

1.3.4 **Area 3** lay to the immediate north of Woodeaton between the village and the B4027, on the north-east summit of a small hill at a height of *c*. 100m aOD (**Figure 3**). The confluence of the Rivers Cherwell and Ray lies 1.5 km to the north-west. The route passed close to the Woodeaton Romano-Celtic temple (Scheduled Monument County No. 107). Extensive scatters of worked flint of Early and Later Neolithic date (*c*. 4000–2400 BC) have been recovered from the field crossed by the route, and lighter scatters of both Mesolithic (*c*. 8500–4000 BC) and also Bronze Age (*c*. 2400-700 BC) date have also been recorded. Considerable evidence of Early Iron Age activity (*c*. 700-400 BC) was found during previous archaeological

investigation in 1991, including small pits, post-holes and gullies. A geophysical survey commissioned by Wessex Archaeology (GSB Prospection 2000) within Area 3 identified probable archaeological features concentrated in the northern half of the area surveyed.

1.3.5 **Area 4** lay adjacent to the northern edge of Area 3 between the B4027 and the floodplain of the River Ray to the east of Islip (**Figure 3**). The route passed to the east of Islip Roman Villa (Scheduled Monument County No. 148). Quantities of Neolithic flint have been recovered from the general area and several potential circular features have been noted as cropmarks seen on aerial photographs and are likely to be of prehistoric date. A field system associated with the Roman villa may extend into the area crossed by the 33Kv line.

1.3.6 Within **Area 5** the route passed through the Roman town of Alchester (Scheduled Monument County No. 18) on the broad western floodplain of the River Ray between Wendlebury and Bicester (**Figures 4**, **5**). In this area, the route of the refurbished line was subdivided into a total of six zones in order to allow a more flexible programme of archaeological mitigation targeted at specific points and types of potential. Zones 1 and 2 were located to the immediate south of the Roman town. Zones 3 and 4 comprise the south-eastern side of Alchester extending beyond the eastern perimeter of the town and Zones 5 and 6 extend beyond the town to the north-east.

1.3.7 While there has been a considerable amount of archaeological investigation within the Roman town of Alchester itself (c.f. Marshall and Brown 1858; Iliffe 1929; Young 1975; Burnham and Wacher 1990), less work has been undertaken within the extra-mural areas and most of that has been concentrated to the north and west of the town (Foreman and Rahtz 1984; Sauer and Crutchley 1998; Sauer 2001; Booth *et al* 2002).

1.3.8 A geophysical survey commissioned by Wessex Archaeology within Zones 2-5 produced clearly defined features and a concentration of extra-mural activity in Zone 4 (GSB Prospection 2000).

- *Zone 1* – this was partly within the Scheduled area. Cropmarks indicate a network of ditches co-aligned with the Roman road from Alchester south to Dorchester. The majority of these are east/west, but some north/south ones have also been noted. The presence of this complex of ditches and trackways suggests that much of the area to the south of the town was subject to some form of systematic agricultural management, or possibly planned extramural suburbs.

- *Zone 2* – this field lay wholly within the Scheduled area. The stream which forms the northern boundary of the field follows the southern edge of the town defences, and the Alchester to Dorchester Roman road runs north/south through the field. Again, a network of ditches is co-aligned with the Roman Road and a watching brief undertaken in 1998 on behalf of Southern Electric plc found three of these ditches (Wessex Archaeology 1999). A 0.35m thick subsoil within the field contained Roman pottery and other contemporary artefacts. Additionally, elements of former ridge and furrow survive within the north-east of this Zone.

- *Zone 3* – the route cut across the south-eastern corner of the Roman town and its defences. The actual corner of the defences lies below the railway embankment, but a bulge in the eastern profile of the embankment suggests that some elements may have survived. Examination of the north-eastern corner of the Roman town in the late 1920s found that a circular mound contained the stone footings of an internal angle tower, and a similar feature may have been present in the south-east.

- *Zone 4* – this was the area immediately to the east of the Roman town. The east gate opens onto this land, and potential extramural settlement here would have been bisected by the east/west aligned road exiting from the gate. A considerable number of burials have been found to the south of this gate.

- *Zone 5* – evidence of Romano-British occupation has been recovered from the fields to the north of Longford Lane. This includes a cremation that may represent an element of a larger cemetery to the south-east of Promised Land Farm.

- *Zone 6* – it is possible that an east/west aligned branch of Akeman Street crosses this area.

1.3.9 Excavations in 1991 in the northern extra-mural settlement of Alchester identified occupation from the Neolithic to the post-Roman periods (Booth *et al* 2002). This work determined that the Roman extra-mural settlement principally comprised a series of ditched plots co-aligned with the Towcester Road. Further, in 2000 the University of Leicester undertook an archaeological evaluation in the south-west corner of the Roman town (Sauer 2000). The remains of town ramparts were discovered below medieval/post-medieval plough disturbance, adjacent to robber trenches containing Anglo-Saxon pottery.

1.3.10 Additionally, the site of a substantial Roman building lies to the west of the Roman town. This area has been subject to recent investigations which have shown the presence here of an early Roman vexillation fortress which precedes the establishment of the Roman town (Sauer 2001).

2 METHODOLOGY

2.1 GEOPHYSICAL SURVEY

2.1.1 The geophysical survey was undertaken by GSB Prospection between July and August 2000 within Areas 3 and 5 only. Specific sites within these areas that relate to the survey include the Woodeaton Romano-Celtic Temple (Area 3) and Alchester Roman Town (Area 5, Zones 2 to 5). As both sites are Scheduled Monuments, licences were granted under Section 42 of the *Ancient Monuments and Areas Act* 1979 (as amended) for the parts of the survey within the protected areas.

2.1.2 The land in each Area was surveyed using a Magnetic Susceptibility meter and a Fluxgate Gradiometer. An initial rapid assessment with both techniques identified areas of higher archaeological potential, and these were then subject to detailed gradiometer survey in order to define the potential archaeological features and to inform the nature of such features. The report on the results of the geophysical survey (GSB Prospection 2000) should be read in conjunction with the current document.

2.2 WATCHING BRIEF

2.2.1 The watching brief was maintained in Areas 1, 2, 3, 4 and 5 (Zones 1 and 6 only) as these areas were regarded as being of low-medium archaeological potential.

2.2.2 A total of 12 trenches was observed for the replacement post settings. These were excavated by the overhead cable contractor using a tracked 360º mechanical excavator with a toothed bucket. The spoil was examined for artefacts and geological content.

2.2.3 The excavation of a *c*. 1.5 km long cable trench was intermittently observed at Woodeaton (Area 3) and at Noke/Islip (Area 4) (**Figure 3**). The trench comprised a 16m wide easement stripped of topsoil along the route to a depth of *c*. 0.30m within which a cable trench 0.70m wide, was dug to a depth of 1.2m through cornbrash and clay. All work was undertaken by the underground cable contractor. Following topsoil stripping, the easement

was intensively examined by the watching brief team and all identified artefacts were retained.

2.2.4 The post settings and cable trench were recorded following the standard Wessex Archaeology numerical context system of complementary written, drawn and photographic records. No soil samples were taken.

2.3 ADVANCE EXCAVATION OF POST SETTINGS

2.3.1 The hand-excavation of post settings occurred within Area 5, Zones 2-5 and was informed by the results of the geophysical survey. This identified locations for the advance excavation of post settings that would cause minimum disturbance to archaeological deposits; the final locations of which were agreed with the Archaeological Officer of Oxfordshire County Council.

2.3.2 A total of thirteen post settings were designated for hand-excavation, of which 11 were subsequently excavated. One post setting lay outside the designated area for excavation while the other necessitated removal of the existing poles prior to excavation. A watching brief was maintained upon these two post settings.

2.3.3 The trenches for these post settings were generally 3m x 1.6m, aligned perpendicular to the direction of the replacement cable. A 180º wheeled excavator fitted with a 1.6m wide ditching bucket removed all topsoil under close archaeological supervision. Machine excavation ceased at the level at which archaeological deposits were encountered or at the top of the cornbrash.

2.3.4 All observed features and deposits were recorded using Wessex Archaeology's *pro forma* recording system, including scale drawings (sections 1:10, plans 1:20) and a full photographic record comprising black and white negatives and colour slides. A detailed trench summary is presented as Appendix 1.

2.3.5 A trench location plan was prepared and site datum was established by traverse from the 64m aOD benchmark on Langford Lane.

2.3.6 All artefacts recovered from excavated contexts were retained. One soil sample was taken from Trench 103.

2.4 REPORT PREPARATION AND ARCHIVING

2.4.1 This report presents a record of the observations within the areas of the watching brief and of the excavation. The paper records have been compiled to form an indexed and internally cross-referenced archive, currently stored at the offices of Wessex Archaeology at Old Sarum, Salisbury, under the project code 48266. In due course the paper archive will be submitted to the Oxfordshire County Museums Service for storage in perpetuity. Subject to the permission of the landowners, it is hoped that the finds will be deposited along with the paper archive.

3 RESULTS

3.1 AREA 1

3.1.1 External national factors (an outbreak of foot and mouth disease) prevented archaeological monitoring in accordance with the agreed programme. As a result, all replacement post settings within Area 1 (**Figure 2**, Post Settings 1 to 6) had been excavated and backfilled prior to archaeological observation.

3.1.2 The depth of each post setting was generally accepted to be *c*. 2m deep and the general stratigraphic sequence in all backfilled post settings is summarised below:

- A dark brown ploughsoil overlay
- A mid yellowish-brown silty sand subsoil with gravel and ironstone inclusions. This deposit contained lenses of a mid bluish-grey soft silty clay.

3.1.3 Three fragments of pottery (one Late Bronze Age and two Roman) were recovered from the ploughsoil in the vicinity of Post Setting 3 (context *001*).

3.2 AREA 2 (INCLUDING POST SETTING 28)

3.2.1 The general stratigraphic sequence within Post Setting 27 at the summit of Drun's Hill (**Figure 2**) comprised:

- A dark brown topsoil overlying;
- An orange-brown subsoil above;
- A yellow sand.

3.2.2 Although no features were observed within the excavated post setting, 12 fragments of furnace bottom or tap slag and 45 sherds of Roman pottery were collected from topsoil deposits (*002*) within the vicinity of Post Setting 27.

3.2.3 The general stratigraphic sequence within Post Setting 28 comprised:

- A dark brown topsoil overlying;
- A greyish clay.

3.2.4 No features were observed within the excavated post setting although 13 fragments of furnace bottom or tap slag were collected from topsoil deposits (*004*) within the vicinity of Post Setting 28.

3.2.5 The finds are consistent with Roman artifacts formerly recovered from Drun's Hill that may relate to a bronze and/or other metal working site associated with the nearby temple at Woodeaton.

3.3 AREA 3

3.3.1 In this area, the cable trench passed to the immediate east and north-east of the Woodeaton Romano-Celtic temple (SM OX107). An increase in magnetic susceptibility in the northern half of Area 3 coincided with gradiometer anomalies and indicated evidence of past ploughing as well as a current field boundary in the centre of the Area. Some of the gradiometer anomalies were considered to be negative features such as ditches (GSB Prospection 2000).

3.3.2 The topsoil within the trench at both the Woodeaton and the Noke sites (Area 4) consisted of a mid grey-brown silty clay loam up to 0.40m thick. In some areas a mid yellow-brown silty clay subsoil up to 0.34m thick was observed and had a sharp interface with the topsoil. Additionally, the undisturbed natural geology in Areas 3 and 4 comprised a brown/yellow-brown clay with exposures of oolitic limestone along the route.

3.3.3 Unstratified artifacts recovered from the topsoil strip of the easement (*10000*; *10003*; *10006*) include pottery predominantly of later prehistoric and Roman date, although a few sherds of post-medieval date were also present. To the north of the centre of Area 3 a small ditch (*10010*) aligned approximately north-east/south-west was observed within the cable trench (**Figure 3**). This feature was 2.05m wide and 0.45m deep and the single fill (*10009*) contained two sherds of later prehistoric pottery and one sherd of Roman pottery. The feature was V-shaped in profile and may be related to field systems contemporary with the adjacent temple complex.

3.3.4 To the south of the ditch a layer of mid grey-brown silty clay (*10012*) was found beneath the topsoil. This was observed for a total length of 28m and was up to 0.54m deep. The deposit contained Roman pottery (19 sherds) and is likely to represent a spread of occupation material associated with the temple complex.

3.3.5 Other clearly defined linear features identified from the geophysical survey were shown by excavation to be related to the underlying limestone geology rather than to any archaeological activity.

3.4 AREA 4

3.4.1 In this Area, the cable route passes to the east of Islip Roman Villa (**Figure 3**). The only identified feature of archaeological interest within Area 4 was a ditch (*10013*) aligned approximately north-north-east/south-south-west. This ditch was 0.75m wide and 0.35m deep, and the single fill (*10014*) contained a quantity (33 sherds) of exclusively later prehistoric pottery. A single fragment of burnt flint was recovered from the adjacent topsoil (*10008*) along with three sherds of post-medieval pottery.

3.5 AREA 5 (Figures 4, 5)

Zone 1

3.5.1 *Trench 85*

Situated to the south-west of the Roman town, the cornbrash was recorded at a depth of 0.42m below current ground level. Overlying this was subsoil (*85002*) and topsoil (*85001*). No archaeological finds or features were recorded.

3.5.2 *Trench 100*

This post setting had been excavated and backfilled prior to archaeological observation.

Zone 2

3.5.3 *Trench 86*

The cornbrash was recorded at a depth of 0.46m below the current ground level and was overlain by a greyish sandy clay alluvial deposit (*86003*). No archaeological finds or features were recorded.

3.5.4 *Trench 87*

This trench demonstrated the most complex stratigraphy out of all the trenches, extending to a depth of 1m below current ground level (see insets, **Figure 4**). Sealing the cornbrash, the earliest deposit comprised a dark greyish-brown coarse sandy silt (*87007*; *87008* (not shown on section)) that may represent some form of levelling or trample. Eight sherds of predominantly 2nd century AD Roman pottery were recovered from this deposit. Cutting this layer was a north/south aligned ditch (*87010*) over 1.33m wide and 0.63m deep. This was filled with a greyish sandy silt (*87009*) which contained limestone blocks that increased in size with depth.

The ditch may be associated with the adjacent Roman road, such as a foundation feature or a drainage ditch relating to an earlier and narrower version of the road. A small sherd of Roman pottery was retrieved from the top of this ditch fill.

3.5.5 Overlying the ditch and following the same alignment was the eastern edge of the Roman road (*87004*) identified within the geophysical survey. It comprised a well-defined limestone kerb with horizontal limestone slabs laid along the kerb, and was generally 0.14m thick. In order to maintain drainage of the road, an east/west aligned gully (*87006*) butted the kerb on the east side. This was 0.72m wide and contained a greyish coarse sandy silt with frequent limestone slabs laid vertically (*87005*). One small fragment of 2nd century AD decorated Samian ware was recovered from this gully, along with another sherd of Roman pottery.

3.5.6 Sealing the gully and abutting the road was a greyish coarse sandy silt layer with limestone fragments (*87003*). This layer contained 49 sherds of Late Roman pottery, as well as a small fragment of Roman glass, some animal bones and some fragments of Roman building material. It is interpreted as some form of levelling or ground make-up in order to bring a compact surface up to the level of the road on the east. Subsoil sealed both this deposit and the road itself.

3.5.7 *Trench 101*

The cornbrash was recorded at a depth of 0.42m below the current ground level. It was cut by a drainage gully (*101007*) which was at least 0.7m wide and was filled with an alluvial greyish sandy clay (*101004*) that contained four sherds of Roman pottery. This fill extended above the gully to cover the cornbrash and is likely to represent an overbank floodplain deposit. In order to assist drainage, a further gully (*101006*) at least 0.85m wide was cut through the clay. This also contained an alluvial greyish sandy clay (*101005*) with Roman greyware pottery (three sherds) and animal bone. A brownish gravelly silt (*101003*) lay above the alluvial deposits.

3.5.8 *Trench 102*

The trench was 0.*87m* deep and the cornbrash was sealed by a thick brownish gravelly silt (*102005*). This contained a quantity (91 sherds) of Late Roman pottery along with a glass base ring of probable 1st-2nd century AD date. The deposit may be some form of levelling or make-up associated with the adjacent Roman road. Above this layer was a north-east/south-west aligned drainage(?) ditch (*102006*) which was at least 1.09m wide and filled with a brown silty clay (*102007*) containing large fragments of limestone, Late Roman pottery (61 sherds) and a coin of 2nd century AD date. A small semi-circular pit (*102008*) also cut the gravelly silt (see insets, **Figure 4**).

This had been backfilled with a coarse yellow sand (*102004*) which contained limestone fragments (*102003*) along with Roman pottery (three sherds, including a fragment of amphora), animal bone and an oyster shell.

Zone 3

3.5.9 *Trench 88*

The earliest identified deposit comprised a waterlogged humic soft grey clay (*88005*) at a depth of 0.74m beneath current ground level. This contained terrestrial and amphibious mollusc shells and is thought to represent a floodplain soil adjacent to Gagle Brook. Whilst the depth of this deposit was not ascertained, it is comparable to a similar layer recorded within Trench 103. The waterlogged clay was sealed by a grey humic layer (*88004*) also containing mollusc shell, below a brownish sandy clay (*88003*) with broken shell inclusions.

3.5.10 The topsoil and subsoil deposits sealing the clays appeared to partially comprise dumped *material* from small scale maintenance dredging of the Gagle Brook adjacent to the trench. No finds were recovered from this trench.

3.5.11 *Trench 103*

The surface of the cornbrash was encountered at a depth of 1.58m. It was sealed by a thick grey humic sandy silt (*103003*) containing terrestrial and amphibious mollusc shells. A 10 litre bulk sample of this deposit was taken for environmental analysis and is described in section 5 below. Assessment suggests that the deposit is a floodplain soil with some seasonal overbank flooding. A single fragment of Roman greyware jar rim was recovered from this deposit.

3.5.12 As with Trench 88, the topsoil and subsoil deposits sealing the silt appeared to principally comprise dumped material from small scale maintenance dredging associated with the Gagle Brook.

Zone 4

3.5.13 Geophysical interpretation within this Zone identified an element of east/ west aligned Roman road associated with co-aligned archaeological features, pits and a concentration of burning to the south of the road.

3.5.14 *Trench 89*

The cornbrash was recorded at a depth of 0.77m below the current ground level and was cut by a 0.43m wide east/west aligned drainage(?) gully (*89010*) containing a bluish sandy clay (*89009*). A humic greyish-brown

clay (*89008*) layer containing charcoal flecks, small limestone fragments and a single sherd of Roman pottery sealed the gully and may represent some form of midden or dump deposit. This layer was truncated to the west by a ditch (*89007*) at least 1.9m wide and on the east by a sub-circular pit (*89005*) at least 1.06m in diameter (see inset, **Figure 4**). The ditch was filled with a brownish sandy silt (*89006*) containing 33 sherds of Roman pottery along with charcoal and animal bone, as well as a possible late 3rd/early 4th century AD coin. The pit contained a brownish sandy silt (*89004*) with large fragments of limestone, Roman pottery (eight sherds) and animal bone.

3.5.15 Sealing the ditch and pit was a dark grey gravelly silty clay (*89003*) that may represent some form of external surface. The finds from this deposit comprised a quantity (92 sherds) of Roman pottery (including fragments of Samian ware), animal bone, iron nails, Roman building material and the base of an oolitic limestone mortar. Immediately above this was 0.6m of topsoil (*89001*) that comprised an element of an east/west aligned ridge of the extant ridge and furrow earthworks.

3.5.16 *Trench 90*

This Trench remained unexcavated for the duration of the project owing to its proximity to the railway line.

Trench 104

3.5.17 The trench was 0.76m deep. Lying above the cornbrash were two deposits of gravelly silt and clay (*104005*; *104004*) containing a substantial amount of Roman pottery (304 sherds) and contemporary ceramic building material (81 fragments). Significantly, several fragments of redeposited human bone were recovered from the gravelly silt and clay, indicating the potential presence of inhumations nearby. A 1st century AD Roman brooch was recovered from the lower gravelly silt. These gravelly silt and clay deposits lay below a succession of subsoil and topsoil deposits (*104001-3*) that comprised an element of an east/west aligned ridge of the ridge and furrow system.

Trench 105

3.5.18 The stratigraphy in this trench extended to a depth of 0.71m below current ground level to where the surface of the cornbrash was encountered. Above this was a greyish silty clay (*105007*) containing charcoal flecks and mid to late Roman pottery (see inset, **Figure 4**). This layer was sealed by a compact gravel road surface (*105006*) that is likely to be the east/west aligned road identified on the geophysical survey.

3.5.19 A 0.86m diameter circular hearth (*105005*) was cut through the road surface and comprised a deliberate placing of limestone fragments (*105004*) beneath a layer of distinct burnt red and yellow sand (*105003*). This feature was sealed by a subsoil (*105002*) that contained 59 sherds of Roman pottery.

Zone 5

3.5.20 *Trench 91*

Recorded under watching brief conditions, the stratigraphic sequence in this trench comprised the following:

- Topsoil to 0.15m over;
- Subsoil containing 13 sherds of Roman pottery over;
- An alluvial bluish sandy clay (*91003*) over;
- Cornbrash (1.19m thickness) over;
- An alluvial bluish grey clay to a depth of 1.5m below current ground surface.

3.5.21 *Trench 92*

Again recorded under watching brief conditions, the stratigraphic sequence in this trench comprised the following:

- Dark brown topsoil over;
- Light to mid yellowish-brown subsoil over;
- Light brownish-grey sandy silt over;
- Light to mid reddish-yellow coarse sandy gravel over;
- Stiff dark bluish grey clay below 2.43m.

Zone 6

3.5.22 *Trenches 93 and 94*

These post settings were *c*. 2m deep and the general stratigraphic sequence can be summarised as follows:

- Dark brown topsoil over;
- Light to mid yellowish-brown subsoil over;
- Light to mid reddish-yellow sandy gravel over
- Stiff dark bluish grey clay.

4 THE FINDS

4.1 INTRODUCTION

4.1.1 The small assemblage of artefacts has, where appropriate, been cleaned and quantified (number and weight of pieces) by material type within each context. The metalwork has been x-radiographed but no cleaning or other conservation measures have been undertaken. The pottery, which provides the main dating evidence for the site, has been divided into broad fabric groups and spot-dated on a context by context basis. All the other material types have been scanned and general information concerning their nature, range, date and condition recorded. The results of this scan are summarised by material type below. A full list of all artefacts recovered, by material type and context, is presented as Appendix 1.

4.2 METALWORK AND METALWORKING DEBRIS

4.2.1 The metalwork assemblage recovered from this site is very small and restricted in its range. Only two copper alloy objects were found, both coins in a very corroded state, with only the barest details visible. One, a possible Æ 1 *nummus* of late 3rd to early 4th century AD date was found in ditch *89007* while a 2nd century AD *As*/*Dupondius* was retrieved from ditch *102006*.

4.2.2 The ironwork largely consists of nails, mostly round headed types although one large, triangular-headed example (Manning 1985, 135, type 2, pl.63, R93-98) was found in the topsoil of Trench 91. In addition, a one-piece brooch with a plain bow, a corroded spring probably consisting of four turns and a triangular catchplate was found in Trench 104 (layer *104005*). Brooches of this type are known as 'Nauheim derivatives' and were most common in the middle years of the 1st century AD.

4.2.3 The small quantity of slag recovered is probably indicative of iron smelting in the vicinity of the site although the dating of any such activity remains uncertain. Most of the pieces seen to derive from furnace bottoms (McDonnell 1983, 83), their uniform, very fine-grained texture and smooth surfaces indicating that the slag was fully molten during formation.

4.3 POTTERY

4.3.1 The pottery is predominantly of Roman date with smaller quantities of later prehistoric and post-medieval/modern sherds. A breakdown of the assemblage by chronological period and broad fabric group is presented in Table 1 below. During the scan, these fabric groups were correlated with the codes used by Oxford Archaeology; this information is held in the project archive. The condition of the assemblage is variable but slight to moderate surface abrasion is apparent on most sherds although the mean sherd weight is relatively high (14g).

4.3.2 The prehistoric group has been dated on fabric grounds alone, the only diagnostic sherd being a single lug handle in a shell-tempered fabric from context *10006*. The flint-tempered fabric is considered characteristic of the Late Bronze Age but the calcareous wares are less easy to attribute to period although they almost certainly belong within the 1st millennium BC.

4.3.3 Coarsewares dominate the assemblage, consisting of various oxidised and grey sandy fabrics, grog-tempered, shelly wares and a few south-east Dorset Black Burnished wares. The majority of sandy wares are from relatively local Oxfordshire sources while the far smaller quantities of shelly wares probably came from the south Midlands. The grog-tempered wares include sherds of the distinctive pink grogged fabric made in the south Northamptonshire/north Buckinghamshire region (Booth and Green 1989) from the late 1st century AD onwards although this industry reached its maximum distribution in the late 3rd and 4th centuries AD. In all these fabrics, jar forms predominate with a far smaller range of open (bowls and dishes) and miscellaneous forms such as lids, flagons and beakers.

Table 1: Pottery breakdown by ware group

Ware group	**No.**	**Wt.**
Prehistoric:		
Flint-tempered	1	8
Calcareous wares	51	273
Roman:		
Samian	39	315
Imported fineware	1	1
Amphora	12	1926
Nene Valley colour-coat	23	377
Oxon colour-coat	14	127
Oxon white mortaria	26	499
Oxidised	56	294
Oxon oxidised	39	150
Oxon white	6	22
White/pink	3	49
Whiteware	8	34
Greyware	289	2477
Fine greyware	27	109
Grog-tempered	314	6078
Shelly wares	31	281
BB1	9	199
Post-medieval/modern:		
Industrial wares	4	36
Redware	4	28

Stoneware	2	87
Totals:	**959**	**13370**

4.3.4 Imported wares are scarce and consist mostly of samian, predominantly of 2nd century AD date. All the amphorae are from the ubiquitous Dressel 20 vessels that were made in southern Spain and used to carry the olive oil produced there across the whole of the Western Empire. British finewares and mortaria are confined to the later Roman products of the Oxfordshire and Nene Valley industries.

4.3.5 The assemblage spans the entire Roman period but few consistently dated groups of any size were identified. Exceptions to this include the material from levelling layers *87003* and *102005* and ditch *102006*, which are all of Late Roman date. All the fabrics and vessel forms present are encompassed by the range of products expected in this area (and identified within the extramural settlement at Alchester: Evans 2001) and are consistent with the deposition and redeposition of domestic debris from the agricultural edges of a Roman town.

4.4 GLASS

4.4.1 Only three pieces of glass were found. A base ring from a colourless, cast, open vessel, found in layer *102005*, is probably of 1st or 2nd century AD date while a tiny chip of pale blue/green vessel glass from Trench 87 is also likely to be of Roman date. The third piece, from context *10006*, is from a 19th or 20th century bottle.

4.5 CERAMIC BUILDING MATERIAL

4.5.1 Modern brick and field drain fragments were found in contexts *10000*, *10003* and *10004* but the assemblage is predominantly of Roman date. *Tegulae* and *imbrex* fragments indicate the presence of substantial structures with tiled roofs in the vicinity. The numerous fragments from Trench 104 are mostly from a single Roman brick; these were made in a variety of sizes (Brodribb 1987, 34-62) but were most commonly used in floors, hypocausts, arches and in the lacing and bonding courses in walls.

4.6 FIRED CLAY

4.6.1 This material type consists of small, featureless fragments in a variety of slightly sandy, oxidised fabrics.

4.7 STONE

4.7.1 Part of the base of an oolitic limestone bowl or mortar, probably from a local source, was found in Trench 89. While almost certainly Roman, objects of this type can only be more precisely dated when the whole profile survives.

4.8 FLINT

4.8.1 The three small pieces recovered consist of a worked flake, a broken blade and an unworked burnt fragment, the latter now discarded. This material is almost certainly residual but cannot be more precisely dated within the prehistoric period.

4.9 SHELL

4.9.1 Only oyster shells were represented here. Both right and left valves were present, suggesting that the oysters were imported fresh as a food resource for the local population.

4.10 ANIMAL BONE

4.10.1 A small group of 334 animal bones was recovered from 17 contexts dated to the Roman period. Cattle, sheep/goat, pig, horse and dog were all represented. The bones are generally in excellent condition and cut marks were observed. The presence of carnivores on site is evidenced by severe gnawing damage to some of the bones.

4.10.2 Although a small group there are enough complete bones to gain some information about the stature of the animals on site. The teeth observed suggest that both old and young animals were present (particularly cattle). Evidence for butchery has survived particularly well, although the presence of two possible worked bones indicates that not all marks on the bones can necessarily be explained by butchery.

4.11 HUMAN BONE

4.11.1 Disarticulated human bone was retrieved from a layer within Trench 104. Age was assessed from the stage of skeletal development (McMinn and Hutchings 1985), and the patterns and degree of age-related changes to the bone. Sex was ascertained from the sexually dimorphic traits of the skeleton (Buikstra and Ubelaker 1994). A record of morphological variations was made following Finnegan (1978). Full details are held in the archive.

4.11.2 The bone was in good condition showing little indication of abrasion or weathering and most of the breaks were old. The majority of the remains represented articulating bones or fragments from the distal end of a left and right leg and ankle region, with four fragments of upper limb possibly from the same individual – a mature (>30 years) adult, possibly male. Two fragments of incompletely fused femur head appear to derive from a second individual of *c*. 17-19 years.

4.11.3 Pathological lesions observed in the calcanea from the older individual include slight exostoses (new bone at tendon/ligament insertions) on the posterior surfaces, and lesions suggestive of the early stages of osteoarthritis in the right medial calcaneal-talus articular surface.

5 PALAEOENVIRONMENTAL

5.1 INTRODUCTION

5.1.1 A single 10 litre bulk soil sample was taken to aid in the interpretation of the layer *103003* in Trench 103. Eight litres of this material was processed for the recovery and assessment of charred plant remains and charcoal. A sub-sample of 2000g was processed for the retrieval of waterlogged remains and to assess the possible alluvial nature of the deposit.

5.2 ASSESSMENT RESULTS

5.2.1 *Description*

The sample comprises a humic silty loam with coarse sand grits; a poorly sorted deposit with few clasts (stones). In view of the extent and morphology of the deposit it is likely that this represents a floodplain soil. There is no evidence of the inclusion of large amounts of overbank alluvium, though some of the sediment obviously derives from this source.

5.2.2 *Charred Plant Remains and Charcoals*

The bulk sample was processed by standard flotation methods; the flot retained on a 0.5mm mesh and the residue fractionated into 5.6mm, 2mm and 1mm fractions and dried. The coarse fractions (>5.6mm) were sorted, weighed and discarded. The flot was scanned under a x10 - x30 stereo-binocular microscope and presence of charred remains quantified (table in archive).

5.2.3 The flot was large with 35% rooty material and a low number of uncharred weed seeds, which can be indicative of stratigraphic movement. Small quantities of charred grain fragments, charred chaff pieces and charred

weed seeds were observed. Small mammal bone and both terrestrial and fresh and brackish water molluscs were present. The presence of some charred remains indicates the presence of activity in the vicinity but tends to confirm the sediment interpretation that this is a buried soil or land surface.

5.2.4 Charcoal was noted from the flot of the bulk sample, however no charcoal fragments of greater than 5.6 mm were retrieved.

5.2.5 *Waterlogged plant remains*
Laboratory flotation was undertaken with flots retained on a 0.25mm mesh and residues on a 0.5mm mesh. Any coarse (>5.6mm), non-waterlogged fraction was sorted, weighed and discarded before the flot and residue were stored in sealed containers with Industrial Methylated Spirits (IMS). The flot was rapidly inspected to determine if waterlogged material occurred. The flot contained plant matter, molluscs and waterlogged seeds, thereby indicating constant waterlogged conditions.

5.2.6 *Snails*
The flot of the deposit contained a number of shells, the majority of which are terrestrial (*Trichia hispida*, *Aegopinella nitidula*) with few amphibious species (*Lymnaea truncatula*). No aquatic species were observed in very rapid scanning. The snails indicate a largely terrestrial environment with some, possibly seasonal, overbank flooding event.

5.3 PALAEOENVIRONMENTAL SUMMARY

5.3.1 In short it cannot be concluded whether this is wholly an alluvial channel fill (very unlikely), an overbank alluvial deposit (unlikely), a terrestrial floodplain soil (possible), or a predominantly floodplain soil with moist habitats for amphibious species and with occasional overbank flooding leading to little sedimentation (probable). *Lymnaea truncatula* is a species common found in low-lying pasture and is the host to liverfluke which infects sheep.

6 DISCUSSION

6.1 AREA 1

6.1.1 Although no archaeological features were identified within Area 1, three fragments of pottery were recovered from the ploughsoil in the vicinity of Post Setting 3. The sherds comprise one of possible Late Bronze Age date, one of locally manufactured coarse Roman greyware and one of Roman Oxford Red Slip ware (*c.* 240-400AD). The latter two are consistent with other evidence of Romano-British settlement activity to the north of

Headington. The Late Bronze Age fragment, although recovered from ploughsoil, may derive from unidentified activity of this date in the vicinity.

6.2 AREA 2

6.2.1 Despite no archaeological features being observed at Drun's Hill, fragments of furnace bottom or tap slag and 45 sherds of Roman pottery were collected from topsoil deposits. These finds are consistent with Romano-British artifacts previously recovered from the area that may relate to a bronze and metal-working site associated with the nearby temple at Woodeaton.

6.3 AREAS 3 AND 4

6.3.1 A limited number of later prehistoric and Roman features, principally ditches, were present in these Areas. The features are likely to relate to enclosures and field systems identified as cropmarks through aerial photography. One of these features (Area 4, ditch *10013*) was the only one found in the whole of the project to contain pottery exclusively of later prehistoric date.

6.3.2 Although no features were found that could be directly related to either the Woodeaton Romano-Celtic temple or the Islip Roman villa, it is clear that archaeological remains of these complexes extend beyond the Scheduled parts of each site.

6.3.3 Additional linear features within Areas 3 and 4 identified on the geophysical survey were found to be the result of changes in the basal geology.

6.4 AREA 5, ZONES 1 AND 2

6.4.1 Although cropmarks within Zone 1 suggest a network of ditches co-aligned with the Roman road from Alchester to Dorchester (**Figure 5**), no archaeological features were recorded in any of the replacement post settings.

6.4.2 Zone 2 lies wholly within the Scheduled area and the Alchester to Dorchester Roman road runs north/south through the Zone. Previous work by Wessex Archaeology had identified elements of a network of ditches co-aligned with the Roman road (Wessex Archaeology 1999), and one such ditch was identified during the excavation within Trench 101.

6.4.3 The Alchester to Dorchester Roman road, identified clearly by the geophysical survey, was conclusively located within Trench 87 and comprised a well-defined limestone kerb and horizontal limestone slabs above a substantial limestone foundation. Pottery of 2nd century AD date

lay below the limestone foundation layer whilst Late Roman pottery lay on and above the road, thus indicative of the period of use. Immediately to the west of the road in Trench 102, a possible roadside ditch was recorded cut into a series of probable levelling deposits.

6.4.4 Also in Trench 102, an undated pit and a drainage ditch containing Late Roman pottery lay above the deposits associated with the Roman road. This suggests that the road may have gone out of use or certainly was not maintained, whilst being encroached upon by agricultural activities.

6.5 AREA 5, ZONE 3

6.5.1 The earliest identified deposit within this Zone at the southern edge of the Roman town comprised a floodplain soil associated with the adjacent Gagle Brook. Although work by the University of Leicester identified the disturbed remains of the town ramparts in the south-western corner of the Roman town adjacent to the Brook, there was no identification of a floodplain soil outside the ramparts to the south (Sauer 2000). This may indicate that the southern ramparts of the town lay sufficiently far away from the Brook so as to avoid seasonal flooding. Topographically, the land rises up slightly to the north away from the Gagle Brook, thereby indicating that the southern walls of the town may have been above any flood line.

6.6 AREA 5, ZONE 4

6.6.1 Trenches 89 and 104 on the eastern side of the Roman town revealed a probable compact external surface containing Roman material. It is not known whether this surface is a Roman feature or a later deposit with residual artefact content. However, drainage appears to have been a problem as shown by the presence within Trench 89 of a small gully superceded by a larger ditch. Above these drainage features was a pit of unknown function. All of the features lay beneath a possible gravel/silt surface containing Late Iron Age/Roman material, presumably residual in this context. Archaeological investigation to the north of the Roman town suggested a decline in extra-mural settlement during the 3rd century AD (Foreman and Rahtz 1984, 45-6).

6.6.2 Trench 104 is situated *c*. 70-100m to the north of the site of 28 unaccompanied inhumation burials that were discovered in 1848 during the construction of the railway (Burnham and Wacher 1990, 103). One of the subsoil deposits within Trench 104 contained several fragments of redeposited human bone. The skeletal elements represented, along with the relatively unabraded condition of the bone, indicate that the remains were probably rapidly redeposited following their disturbance in antiquity from

more than one grave in close proximity. This redeposition may have been in the form of disarticulated fragments.

6.6.3 The plan of the Roman town as presented in Burnham and Wacher (1990, fig. 24) shows the location of an east/west aligned inter-valum road which meets the rampart about halfway between the 1848 burials and Trench 104 (**Figure 5**). Although the road is not shown to continue to the east of the rampart on the plan, there is a suggestion on the accompanying aerial photograph (*ibid*. fig. 25) that it may have done so. If this were to have been the case, and the 19th century burials were Roman (no date was established), the evidence recovered in the current investigations suggests that burials may have been located to either side of that road as it left the Roman town. The distance from the known burials to the south renders it unlikely that all or probably any of the material within Trench 104 could have originated from there.

6.6.4 Trenches 89 and 104 lay beneath elements of east/west aligned ridge and furrow that is likely to have disturbed any underlying *in situ* archaeological layers. This may account for the redeposited human remains within Trench 104.

6.6.5 Further to the north-east, a compact gravel surface was recorded in Trench 105. It is possible that this represents an unpaved section of an east/west aligned road emerging from the Roman town along the line of what is now Langford Lane (**Figure 5**). The road lay below a greyish silty clay deposit that may represent a deliberate levelling episode. A hearth cut through this deposit and also into the gravel surface indicates activity which post-dates the use of the road. An area of probable burning identified on geophysics (but not within the excavation area) may be associated with this hearth. As Sauer (2000) recorded Anglo-Saxon pottery within robber trenches to the south-west of the Roman town, the hearth may therefore be linked with occupation of the town in the post-Roman period.

6.7 AREA 5, Zones 5 and 6

6.7.1 These Zones lie within the immediate floodplain of the Gagle Brook and no archaeological features were identified here. A limited number of Roman finds was recovered from a subsoil deposit within Zone 5. This is consistent with previously reported finds which might indicate that contemporary occupation extended to the north of Langford Lane. However, the limited number of finds may also be attributed to agricultural practices.

7 CONCLUSION

7.1 The archaeological remains discovered during the course of the watching brief (Areas 1 to 4) confirmed the current understanding of the date and nature of activities in these areas. Features associated with the Woodeaton Romano-Celtic temple and the Islip Roman villa were shown to extend beyond their respective Scheduled boundaries.

7.2 The hand-excavated trenches within the Scheduled Monument of Alchester Roman Town identified several features previously seen as crop-marks or recorded on the geophysical survey commissioned as part of the current project.

7.3 These limited excavations within and adjacent to the Roman town were not substantial enough for a more precise interpretation other than those presented above. However, valuable information has been recovered regarding the fabric of the Roman roads leading southwards and eastwards from the town and the possible presence of extramural burials to the east.

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APPENDIX 1: All finds by context and material type (no/wt in g)

Key: CBM = Ceramic Building Material; Post-med = Post-medieval

	Material Type:													
					Pottery:									
Context	**Copper alloy** (no. only)	**Iron** (no. only)	**Slag**	**Prehist.**	**Roman**	**Post-med**	**Glass**	**CBM**	**Fired clay**	**Stone**	**Flint**	**Shell**	**Animal bone**	**Human bone**
001				1/8	2/25									
002			7/154		18/152									
003												1/28		
004			5/730											
10000			1/41		1/1	1/9		1/7						
10003					24/559	2/47		11/516					3/24	
10004						3/73		2/240						
10006			2/151	15/108	29/417	1/3	1/24	1/68			1/3		1/9	
10008						3/19								
10009				2/36	1/23									
10012		1			19/149								1/7	
10014				33/127									7/10	
87003		1			49/318		1/1	3/97	7/33				6/11	
87005					2/4									
87007					2/81									
87008					6/11									
87009					1/3									
89003		6			92/862			8/260		2/171			46/442	
89004					8/132								1/30	
89006	1	3			33/555								3/35	
89008					1/32									

	Material Type:													
				Pottery:										
Context	**Copper alloy** (no. only)	**Iron** (no. only)	**Slag**	**Prehist.**	**Roman**	**Post-med**	**Glass**	**CBM**	**Fired clay**	**Stone**	**Flint**	**Shell**	**Animal bone**	**Human bone**
91001		1												
91002					13/251			2/40						
92001													9/95	
101004					4/28									
101005					3/5								1/21	
102003					3/511							1/26	1/74	
102005		1			81/1091		1/13	3/248	1/16			8/99	113/1863	
102007	1	1			61/1906			7/390				1/17	34/201	
103003					1/12								1/12	
104002				1/2	45/207			5/79				1/14	5/25	
104003					1/15									
104004		10			304/4301			81/6155				10/100	195/1541	11/225
105002					58/716			5/104				15/282	10/178	
105007					7/167									
Pole 27			5/469		27/384									
Pole 28			8/1015								1/1			
Totals	**2**	**24**	**28/2560**	**52/281**	**897/12938**	**10/151**	**3/38**	**129/8204**	**8/49**	**2/171**	**4/4**	**37/566**	**437/4578**	**11/225**

APPENDIX 2: Trench Summaries

Key: b.g.l. = below ground level; m aOD = metres above Ordnance Datum (Newlyn)

Trench No. 85	**Ground level m aOD:** 61.48m	**Dimensions:** 2.5m x 1.6m **Max. depth:** 0.42m
Context	**Description**	**Depth b.g.l.**
85001	Topsoil - dark brown friable clayey silt.	0 - 0.23m
85002	Subsoil - mid yellowish-brown friable silty clay.	0.23 - 0.42m
85003	Natural geology - light yellowish-brown coarse sand with occasional small gravel pebbles.	>0.42m

Trench No. 86	**Ground level m aOD:** 61.77m	**Dimensions:** 3.1m x 1.73m **Max. depth:** 0.58m
Context	**Description**	**Depth b.g.l.**
86001	Topsoil - dark brown friable clayey silt.	0 - 0.13m
86002	Subsoil - light to mid yellowish-brown friable silty clay.	0.13 - 0.31m
86003	Layer - mid brownish-grey sandy clay with occasional small sub-rounded gravel.	0.31 - 0.46m
86004	Natural geology - light yellowish-brown coarse sand with occasional small gravel pebbles.	>0.46m

Trench No. 87	**Ground level m aOD:** 62.37m	**Dimensions:** 3.2m x 1.6m **Max. depth:** 0.99m
Context	**Description**	**Depth b.g.l.**
87001	Topsoil - dark brown friable clayey silt.	0 - 0.17m
87002	Subsoil - light to mid yellowish-brown friable silty clay.	0.17 - 0.28m
87003	Layer - mid greyish-brown coarse sandy silt with frequent angular limestone fragments.	0.28 - 0.39m
87004	Roman Road – limestone flagstones, laid horizontally, forming a kerb on the eastern side. The western side was composed of frequent angular limestone fragments within a dark brown friable mid sandy silt.	0.28 - 0.42m
87005	Fill of *87006* – mid greyish-brown coarse sandy silt with frequent angular limestone fragments.	0.39 - 0.91m
87006	Linear Gully – east/west aligned, >1.3m long x 0.72m wide x 0.52m. The gully is steep sided and flat bottomed and is filled with *87005*.	0.39 - 0.91m
87007	Layer – mid to dark greyish-brown coarse sandy silt with frequent small angular limestone fragments. Equivalent to *87008*.	0.39 - 0.47m
87008	Layer – mid to dark greyish-brown coarse sandy silt with frequent small angular limestone fragments. Equivalent to *87007*.	0.39 - 0.47m
87009	Fill of *87010* – frequent angular limestone blocks within a mid grey coarse sandy silt. The limestone blocks increase in size with depth.	0.31 - 0.94m
87010	Linear cut – north/south aligned, .3.2m long x >1.33m wide x 0.63m deep. The cut is steep-sided and flat-bottomed and is filled with *87009*.	0.31 - 0.94m
87011	Natural geology- light yellowish-brown coarse sand with occasional small gravel pebbles.	>0.22m

Trench No. 88	**Ground level m aOD:** 62.81m	**Dimensions:** 3m x 1.6m **Max. depth:** 0.84
Context	**Description**	**Depth b.g.l.**
88001	Topsoil - dark brown soft silty clay.	0 - 0.23m
88002	Subsoil - light to mid yellowish-brown friable silty clay. Frequent root action.	0.23 -0.51m
88003	Layer – mottled mid reddish-brown and mid grey plastic fine sandy clay, with frequent small shell fragments and moderate small sub-angular stones.	0.34 - 0.50m
88004	Layer – mid grey with mid reddish-brown plastic silty clay containing occasional freshwater mollusc and occasional charcoal flecks.	0.50 - 0.74m
88005	Layer – mid to light grey plastic coarse sandy silt with frequent mollusc shells, frequent small to medium limestone fragments and occasional charcoal flecks.	>0.74m

Trench No. 89	**Ground level m aOD:** 62.88m N, 63.20m S	**Dimensions:** 3m x 1.6m **Max. depth:** 0.99m
Context	**Description**	**Depth b.g.l.**
89001	Topsoil - dark brown friable fine sandy silt.	0 - 0.6m
89002	Not used	
89003	Layer – very dark grey compact silty clay with frequent small to medium sub-angular to sub-rounded gravel pebbles.	0.6 - 0.85m
89004	Fill of *89005* – mid brownish-grey plastic course sandy silt with large limestone fragments and moderate small to medium sub-angular to sub-rounded gravel pebbles.	0.85 - 1.37m
89005	Pit – sub-circular pit, 1.06m long x 0.68m wide x 0.52m deep, with concave sides and a rounded base. Filled with *89004*.	0.85 - 1.37m
89006	Fill of *89007* – mid brownish grey soft course sandy silt with occasional moderate small to medium sub-angular to sub-rounded gravel pebbles and occasional charcoal flecks.	0.72 - >1.2m
89007	Linear Cut – north/south aligned, >1.9m wide x >1.9m long x >0.4m deep. Filled with *89006*.	0.72 - >1.2m
89008	Layer – mid greyish-brown very soft mid sandy clay with frequent charcoal flecks and fragments and moderate small sub-angular to sub-rounded gravel pebbles.	0.7 - 0.79m
89009	Fill of *89010* – light bluish grey plastic mid sandy clay with occasional small sub-rounded gravel pebbles.	0.72 - 0.87m
89010	Linear Cut – east/west aligned, 0.15m deep x 0.64m long x 0.43m wide with concave sides and a flat base. Filled with *89009*.	0.72 - 0.87m
89011	Natural geology – mottled light brownish-yellow coarse sandy silt with occasional small gravel pebbles and occasional lenses of coarse sand.	>0.85m

Trench No. 91	**Ground level m aOD:** 62.89m	**Dimensions:** 3m x 1.6m **Max. depth:** 2m
Context	**Description**	**Depth b.g.l.**
91001	Topsoil - dark brown friable silty clay.	0 - 0.15m
91002	Subsoil - light yellowish-brown friable fine sandy clay. Frequent small mollusc shells.	0.15 - 0.23m
91003	Layer – light bluish grey coarse sandy clay with frequent small sub-angular to sub-rounded gravel.	0.23 - 0.31m
91004	Layer – mottled light yellowish-brown/light reddish-yellow coarse sandy clay with frequent small gravel pebbles.	0.31 - 1.5m
91005	Alluvium – stiff dark bluish grey clay with occasional silica fossils.	>1.5m

Trench No. 92	**Ground level m aOD:** 62.89m	**Dimensions:** 3m x 1.6m **Max. depth:** 2m
Context	**Description**	**Depth b.g.l.**
92001	Topsoil - dark brown friable silty clay.	0 - 0.15m
92002	Subsoil - light to mid yellowish-brown friable sandy silt	0.15 - 0.46m
92003	Layer - light brownish grey fine sandy silt with frequent small sub-angular to sub-rounded gravel.	0.46 - 1.15m
92004	Layer - light to mid reddish-yellow coarse sandy gravel	1.15 - 2.4m
92005	Alluvium - Stiff dark bluish grey clay with occasional silica fossils.	>2.43m

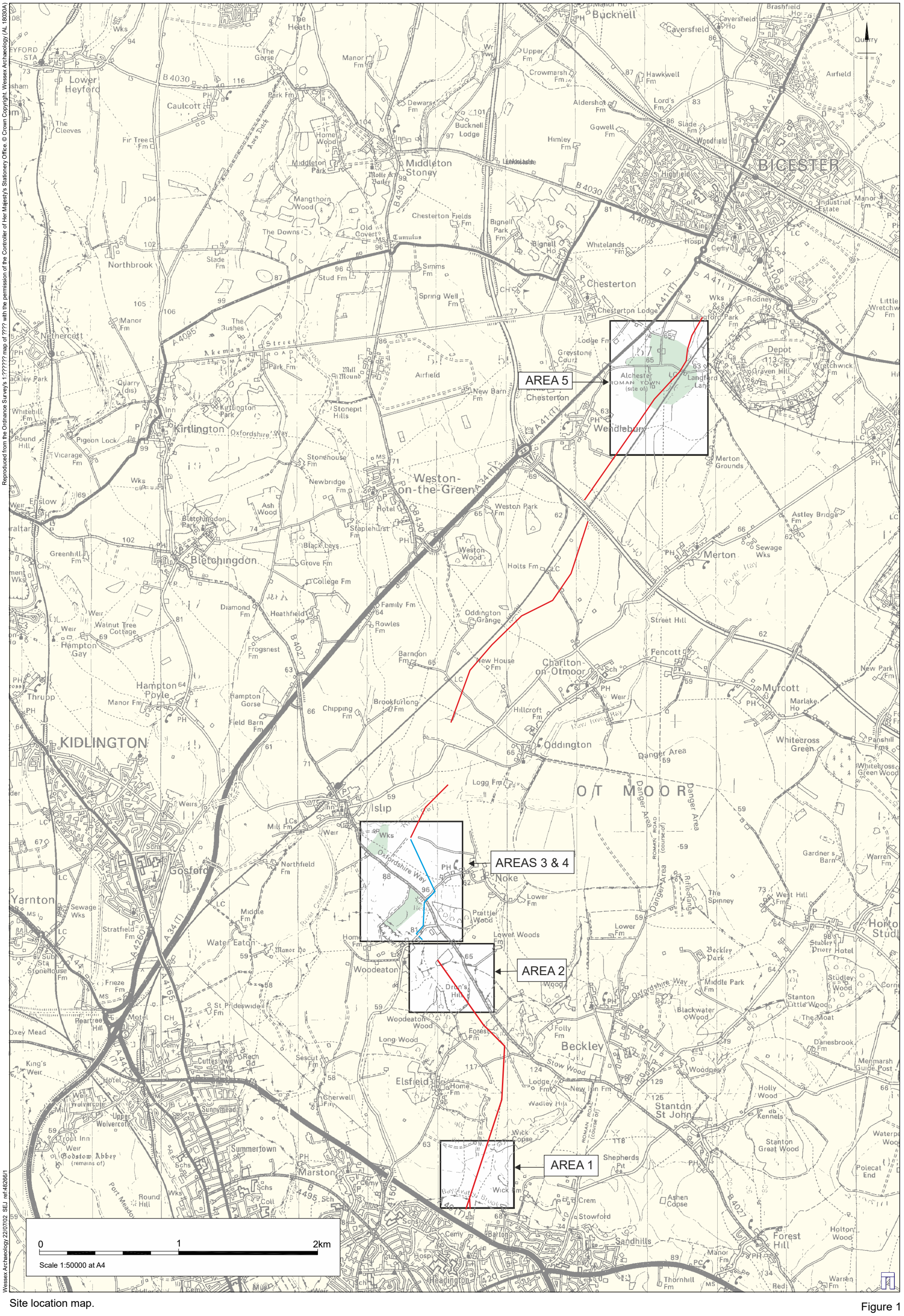
Trench No. 101	**Ground level m aOD:** 61.81m	**Dimensions:** 3.1m x 1.6m **Max. depth:** 0.63m
Context	**Description**	**Depth b.g.l.**
101001	Topsoil - dark brown friable clayey silt.	0 - 0.2m
101002	Subsoil - mid yellowish-brown friable silty clay.	0.2 - 0.39m
101003	Layer - mid brown clayey silt with frequent small to medium sub-angular to sub-rounded gravel pebbles.	0.39 - 58m
101004	Fill of *101006* - mid grey plastic mid sandy clay.	0.41 - 0.65m
101005	Fill of *101007* - mid grey plastic mid sandy clay with moderate small gravel pebbles.	0.34 - 0.64m
101006	Linear Cut – north-east/south-west aligned, >1.66m long x >0.7m wide x 0.22m deep, sharp sided and flat bottomed. Filled with *101004*.	0.41 - 0.65m
101007	Linear Cut – north/south aligned, >0.85m wide x >1.55m long x >0.29m deep, sharp-sided and flat-bottomed. Filled with *101005*.	0.34 - 0.64m
101008	Natural geology– light to mid reddish-yellow coarse sandy gravel.	>0.42m

Trench No. 102	**Ground level m aOD:** 62.59m	**Dimensions:** 3m x 3.6m **Max. depth:** 0.98m
Context	**Description**	**Depth b.g.l.**
102001	Topsoil - dark brown friable fine sandy silt.	0 - 0.24m
102002	Subsoil - mid yellowish-brown friable silty clay.	0.24 - 0.48m
102003	Fill of *101008* - dark brown mid sandy silt with frequent medium sub-angular limestone fragments.	0.46 - 0.49m
102004	Fill of *101008* – mid reddish-yellow course sand.	0.49 - 0.52m
102005	Layer – mid brownish-yellow course sandy silt with frequent small sub-angular to sub-rounded gravel.	0.48 - 0.82m
102006	Linear Cut – north-east/south-west aligned, >1.09m wide x >1.6m long x >0.4m deep, with concave sides. Filled with *102007*.	0.56 – >0.99m
102007	Fill of *102006* – mid brown silty clay with frequent medium to large limestone fragments.	0.56 – >0.99m
102008	Cut – semi-circular shaped pit with concave sides, 1.2m diameter. Filled with *102003* and *102004*.	0.46 - 0.96m
102009	Natural geology - light yellowish-brown coarse sand with occasional small gravel pebbles.	0.87 - 0.98m

Trench No. 103	**Ground level m aOD:** 62.94m	**Dimensions:** 4m x 1.6m **Max. depth:** 2m
Context	**Description**	**Depth b.g.l.**
103001	Topsoil - mid brown friable fine silty clay.	0 - 0.38m
103002	Subsoil – light to mid brown clayey silt with moderate small limestone pebbles.	0.38 - 0.82m
103003	Layer – mid to light grey plastic coarse sandy silt with frequent mollusc shells, frequent small to medium limestone fragments and occasional charcoal flecks.	0.82 - 1.58m
103004	Natural geology – mottled light brownish-yellow coarse sandy silt with occasional small gravel pebbles and occasional lenses of coarse sand.	>1.58m

Trench No. 104	**Ground level m aOD:** 63.33m	**Dimensions:** 3.25m x 1.6m **Max. depth:** 0.96m
Context	**Description**	**Depth b.g.l.**
104001	Topsoil - dark brown friable fine sandy silt.	0 - 0.18m
104002	Layer – compact mid to dark brown fine sandy silt.	0.18 - 0.53m
104003	Layer – light to mid brownish yellow loose mid sandy gravel with frequent small limestone granules.	0.18 - 0.33m
104004	Layer – mid brown coarse sandy silt with frequent small to medium sub-angular pebbles.	0.32 - 0.62m
104005	Layer – soft mid grey coarse sandy clay with frequent small sub-rounded pebbles.	0.62 - 0.76m
104006	Natural geology – mottled light brownish-yellow coarse sandy silt with occasional small gravel pebbles and occasional lenses of coarse sand.	>0.76m

Trench No. 105	**Ground level m aOD:** 63.17m	**Dimensions:** 3.7m x 1.6m **Max. depth:** 0.79m
Context	**Description**	**Depth b.g.l.**
105001	Ploughsoil - dark brown friable mid sandy silt.	0 - 0.28m
105002	Subsoil – dark brown compact mid sandy silt.	0.28 - 0.39m
105003	Fill of *105005* – distinct yellowish-red and yellow compact coarse sand.	0.39 - 0.49m
105004	Fill of *105005* – eight limestone fragments deliberately placed within cut.	0.49 - 0.57m
105005	Cut – circular pit, 0.86m diameter, with concave sides and a rounded base. Filled with *105003* and *105004*.	0.39 - 0.67m
105006	Layer – dark brownish yellow compact course sandy silt with frequent small to medium sub-rounded to rounded gravel pebbles.	0.39 - 0.6m
105007	Layer – dark brownish grey soft silty clay with occasional small sub-rounded to sub-angular gravel pebbles and frequent charcoal flecks.	0.6 - 0.71m
105008	Natural geology - light yellowish-brown coarse sand with occasional small gravel pebbles.	>0.71m
105009	Layer – light greyish white soft course silty clay.	0.36 - 0.39m



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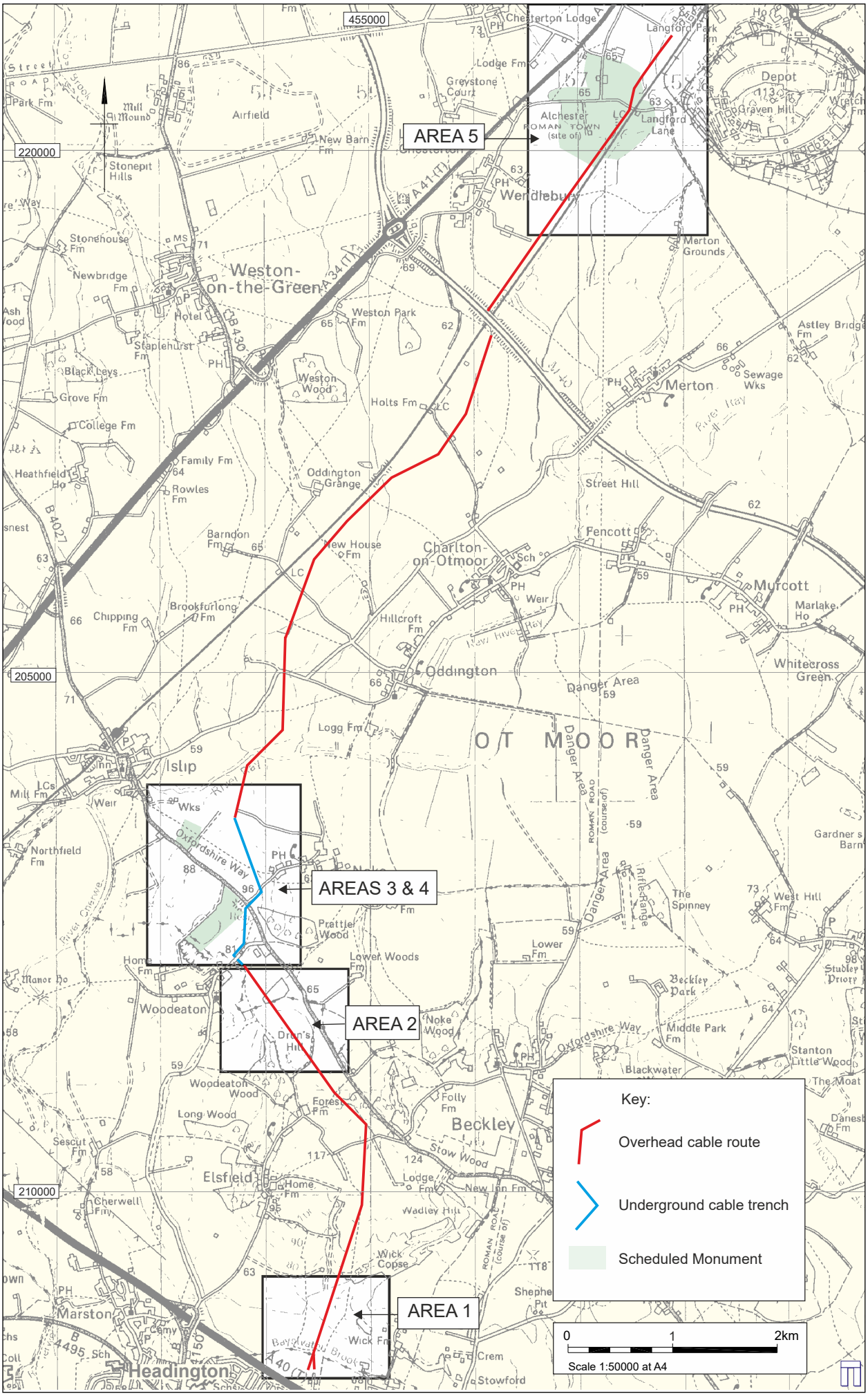
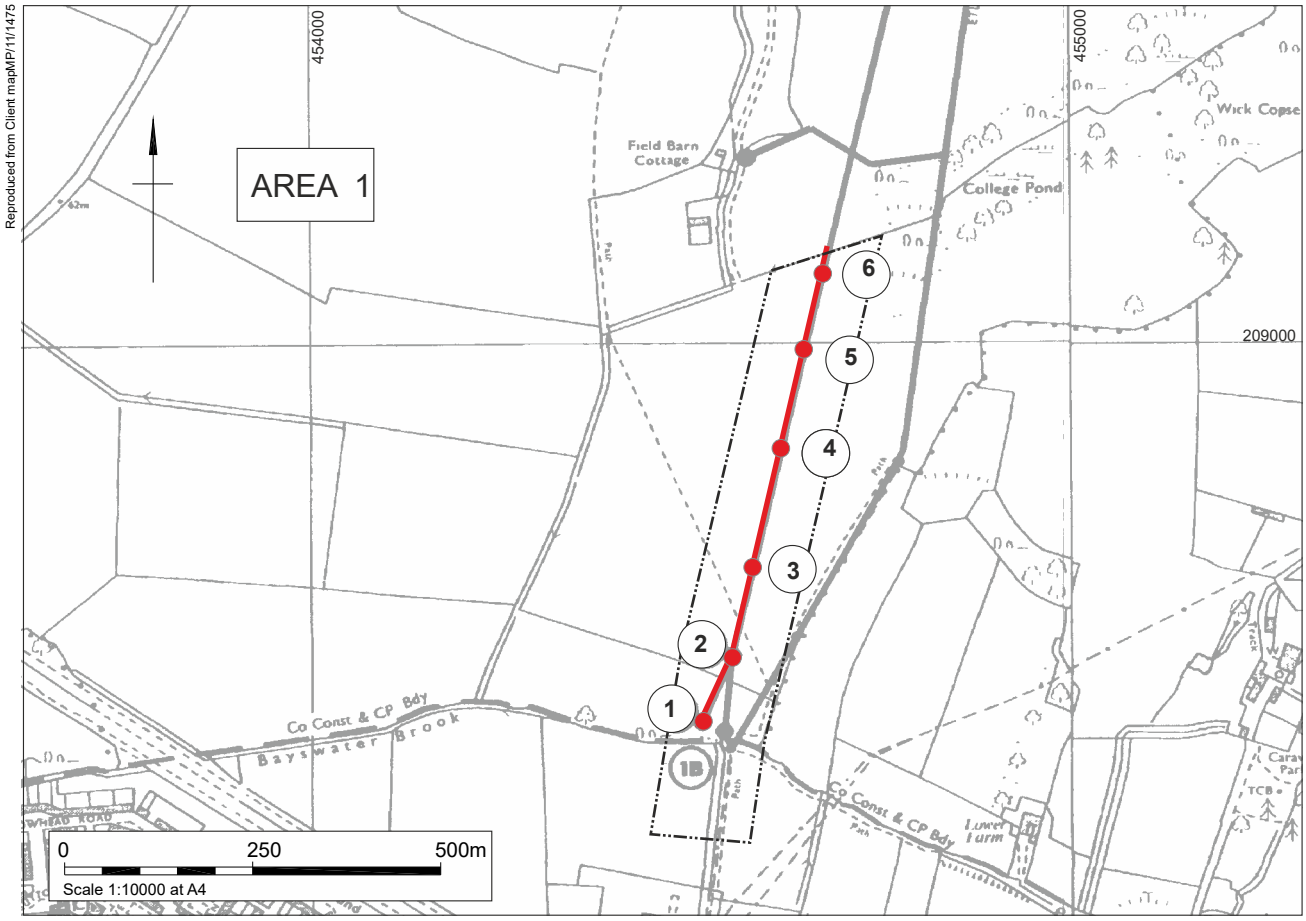
Site location map.

Figure 1

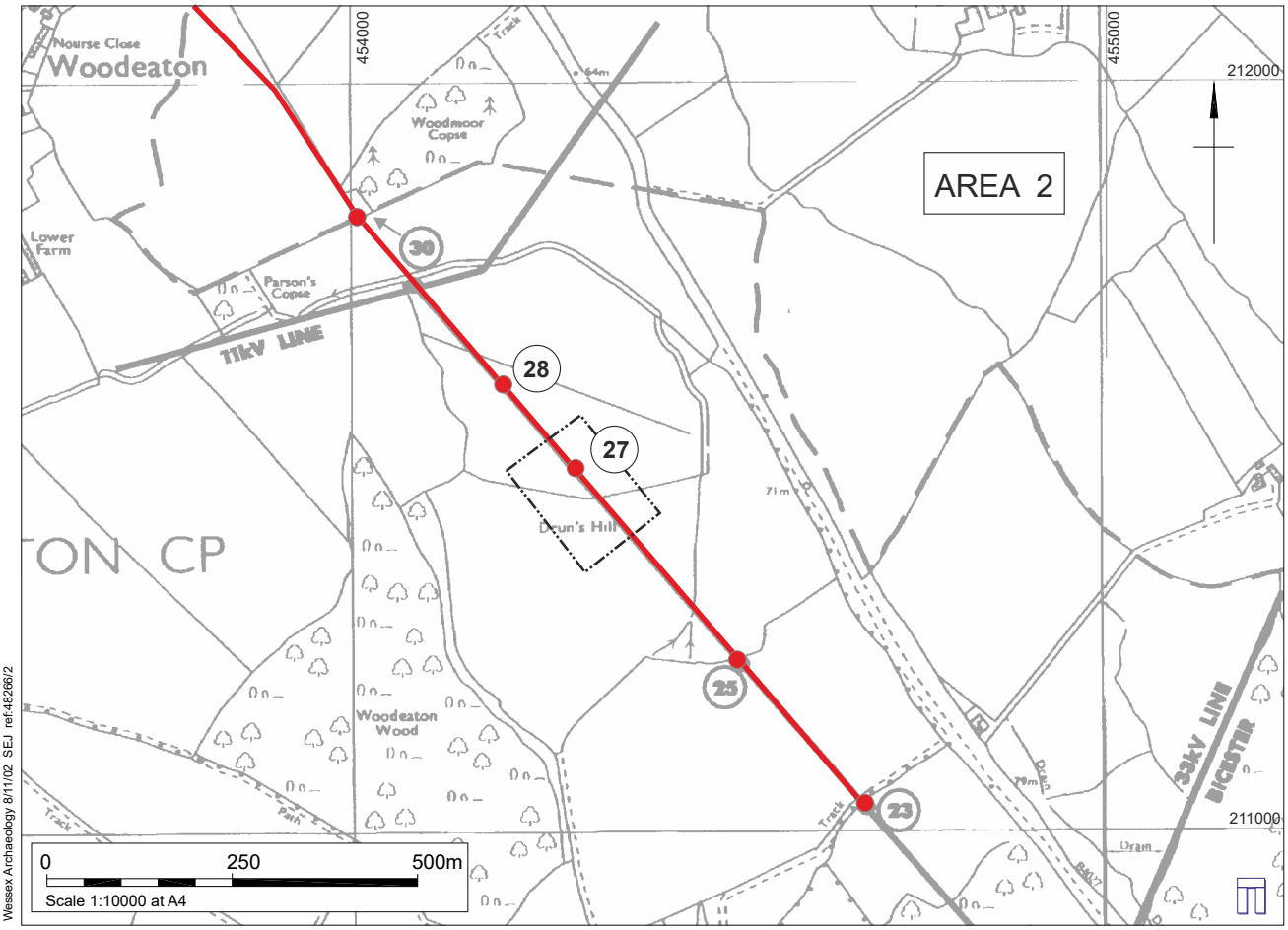


Site location map.

Figure 1

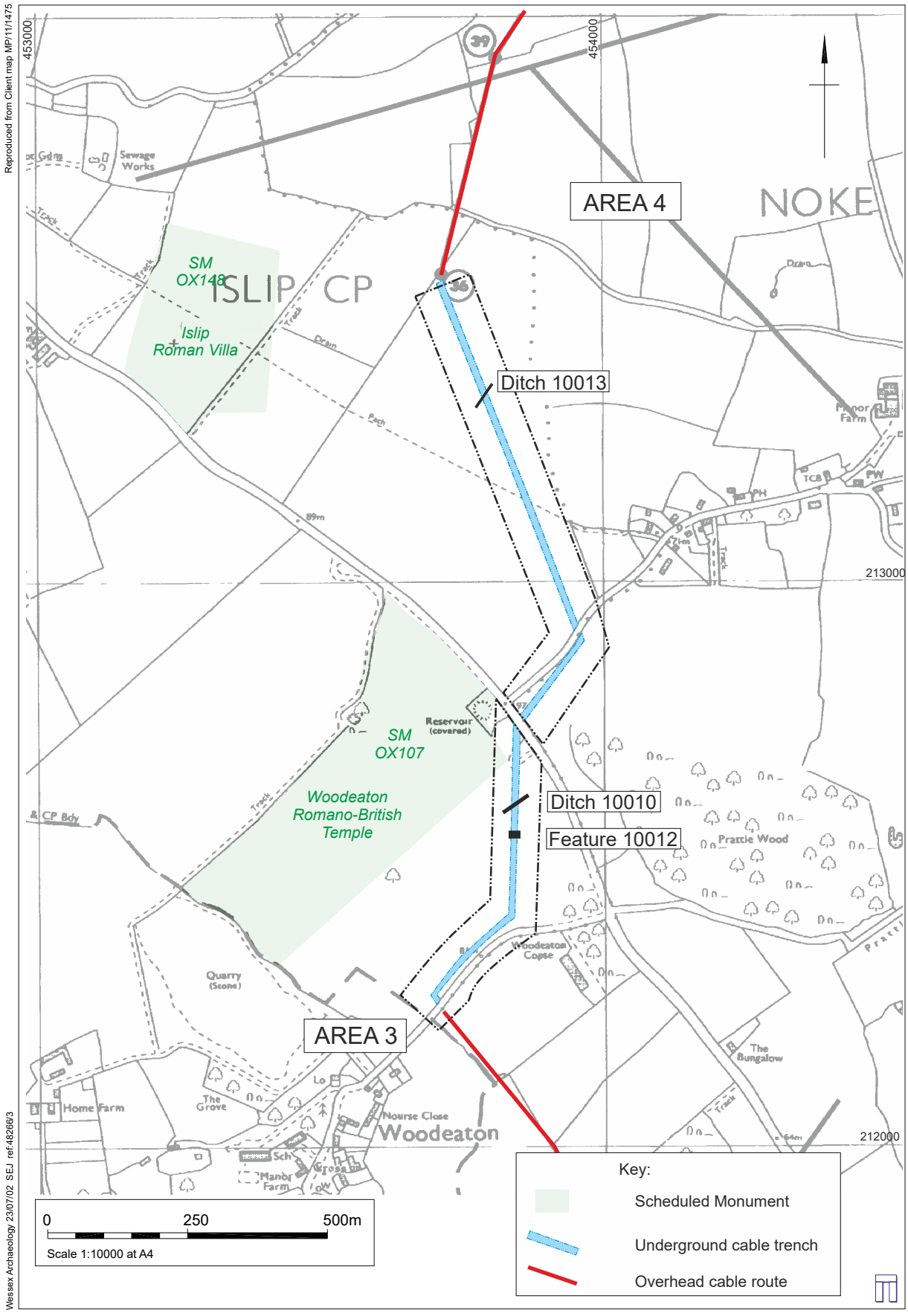


Area 1: Cable route and corridor watched, showing location of post settings 1 - 6.

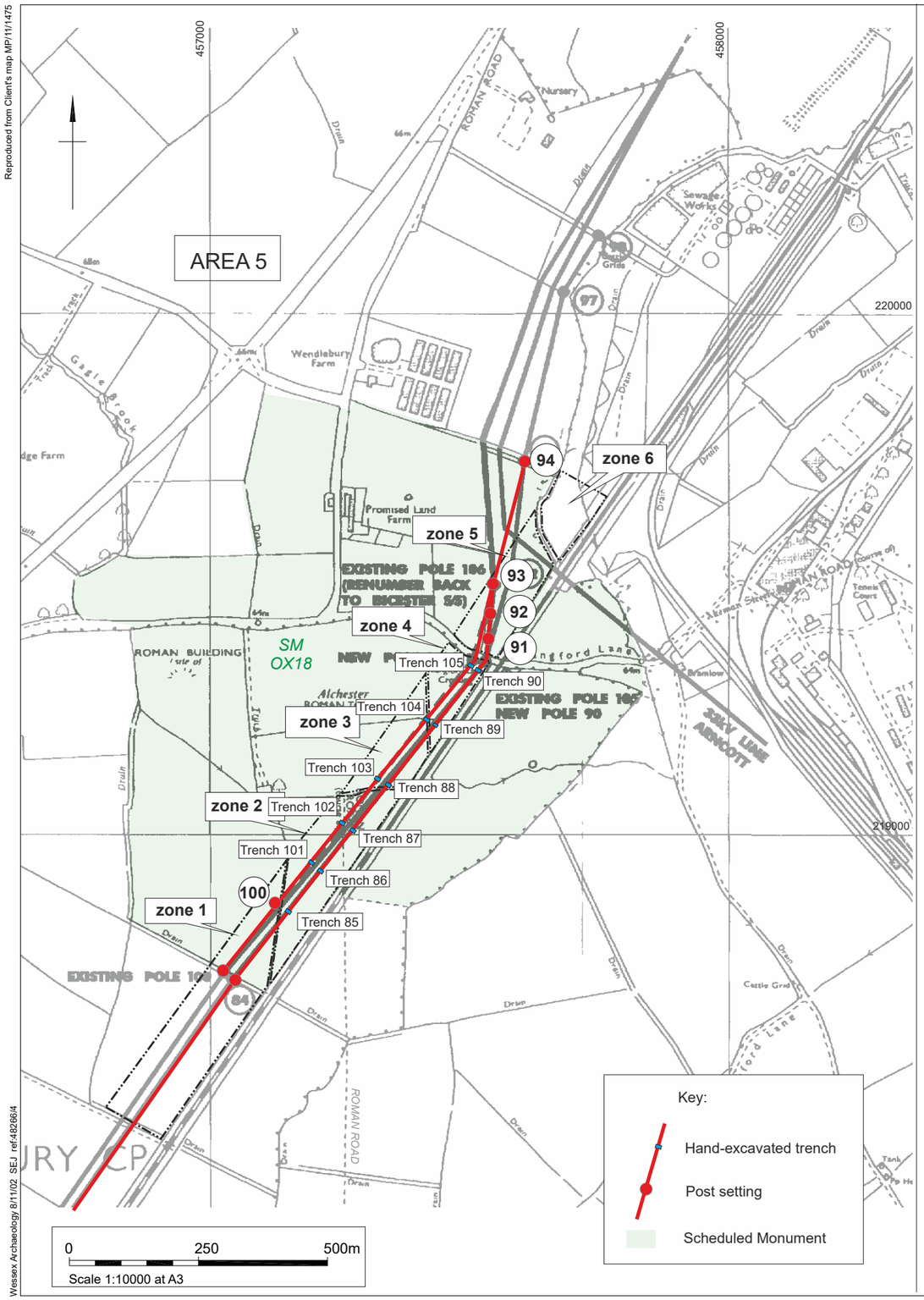


Area 2: Cable route and corridor watched, showing location of post settings 27 and 28.

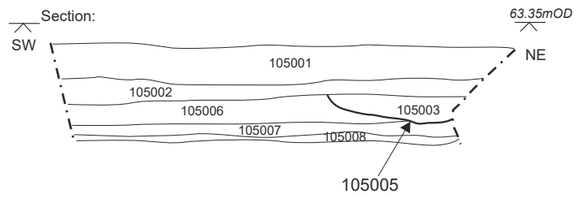
Figure 2



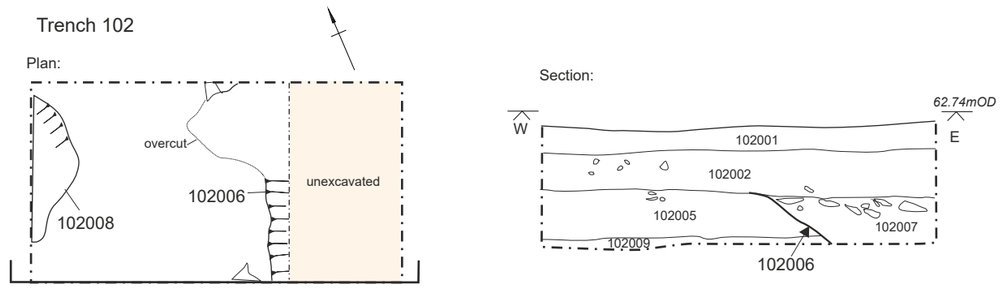
Areas 3 and 4: Underground cable trench showing location of archaeological features. Figure 3



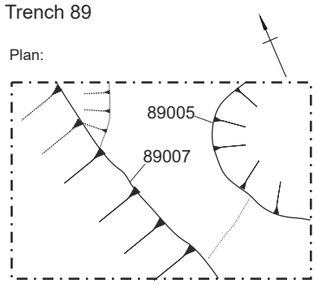
Trench 105



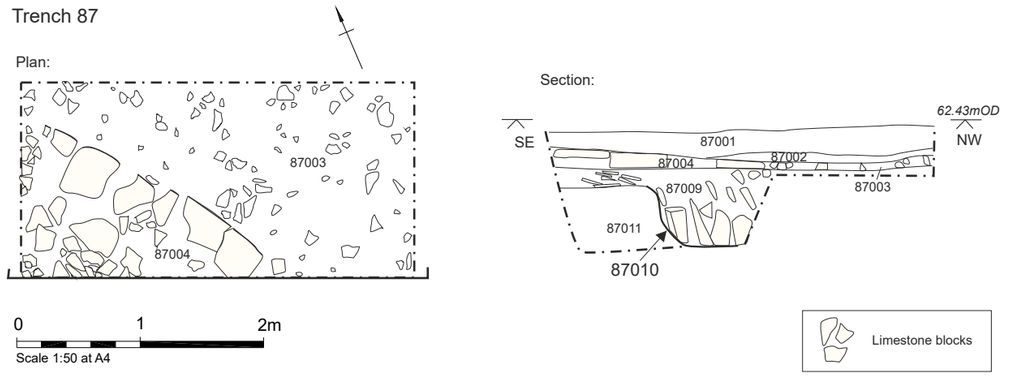
Trench 102



Trench 89



Trench 87



Area 5: Location of zones 1 -6, post settings and hand excavated trenches with plans and sections of archaeological results.

Figure 4

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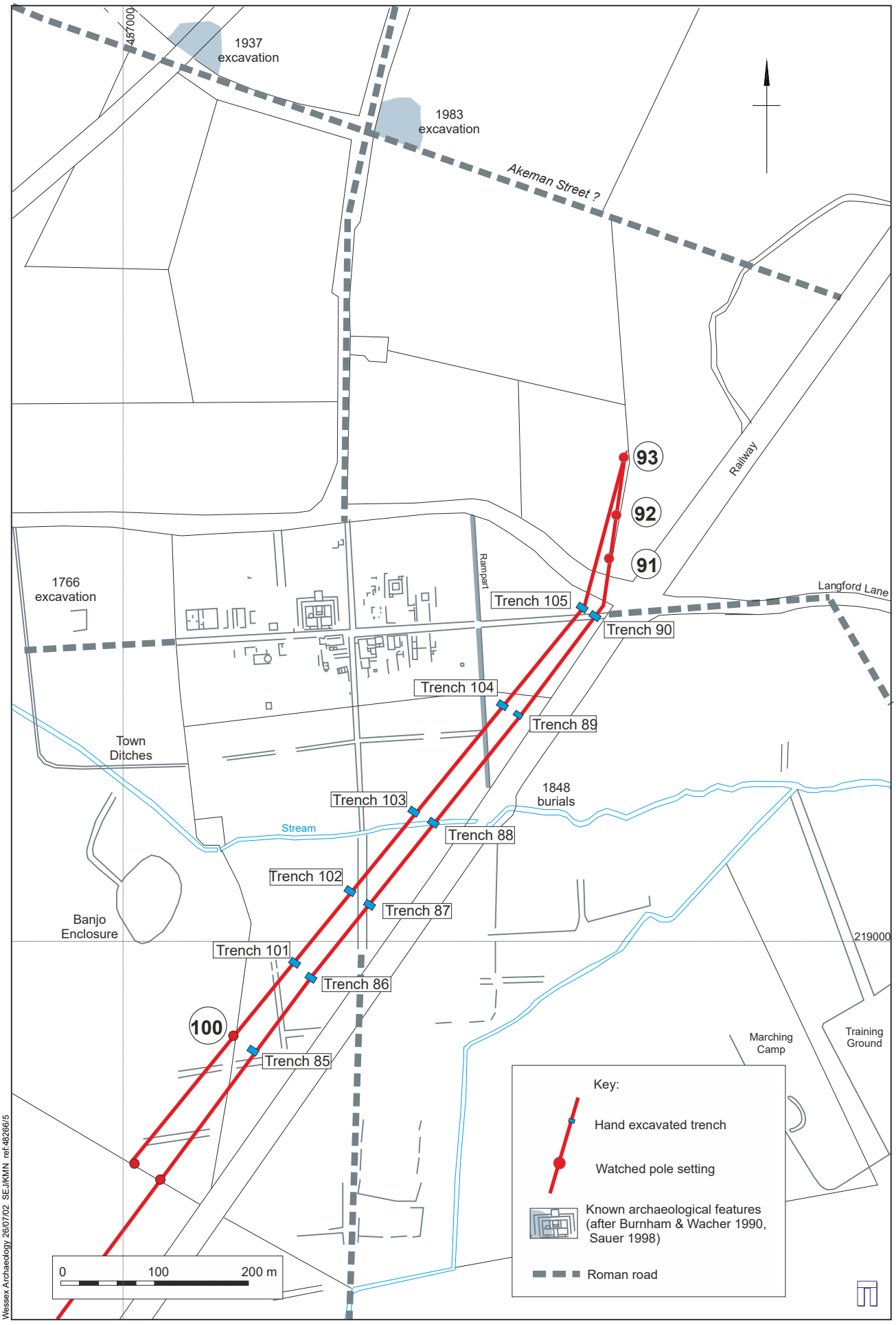

Aera 5: Known archaeological features in relation to trench locations. Figure 5